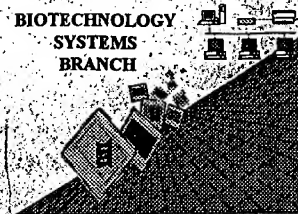


RAW SEQUENCE LISTING
ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH



14846
RECEIVED

JAN 08 2002

TECH CENTER 1600/2900

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/84,091

Source: 01PK

Date Processed by STIC: 12/20/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by the treatment given to all mail coming via the Brentwood Mail Facility.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

1. EFS-Bio (<http://www.uspto.gov/efb/efs/downloads/documents.htm>), EFS Submission

User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
1911 South Clark Street, Crystal Mall One, Sequence Information, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, 2011 South Clark Place, Customer Window, Box Sequence, Crystal Plaza Two,
Lobby, Room 1B03, Arlington, Virginia 22202

4. Federal Express Delivery, 2011 South Clark Street, Crystal Plaza 2, Room 1B03-Mailroom, Box Sequence,
Arlington, VA 22202

RECEIVED

JAN 08 2002

OIPE

TECH CENTER 1600/2900

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/841,091

DATE: 12/20/2001
TIME: 21:07:02

Input Set : A:\NEMC-215.txt
Output Set: N:\CRF3\12202001\I841091.raw

PS
Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Kuliopulos, Athan
4 Covic, Lidiya
6 <120> TITLE OF INVENTION: G Protein Coupled Receptor (GPCR) Agonists and
7 Antagonists and Methods of Activating and Inhibiting
8 GPCR Using the Same
10 <130> FILE REFERENCE: 18475-034
12 <140> CURRENT APPLICATION NUMBER: 09/841,091
13 <141> CURRENT FILING DATE: 2001-04-23
15 <150> PRIOR APPLICATION NUMBER: 60/198,993
16 <151> PRIOR FILING DATE: 2000-04-21
18 <160> NUMBER OF SEQ ID NOS: 37
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 19
24 <212> TYPE: PRT
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
29 Peptide Sequence
31 <400> SEQUENCE: 1
32 Arg Cys Leu Ser Ser Ser Ala Val Ala Asn Arg Ser Lys Lys Ser Arg
33 1 5 10 15
35 Ala Leu Phe
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 13
41 <212> TYPE: PRT
42 <213> ORGANISM: Artificial Sequence
44 <220> FEATURE:
45 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
46 Peptide Sequence
48 <400> SEQUENCE: 2
49 Ala Val Ala Asn Arg Ser Lys Lys Ser Arg Ala Leu Phe
50 1 5 10
53 <210> SEQ ID NO: 3
54 <211> LENGTH: 7
55 <212> TYPE: PRT
56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
60 Peptide Sequence
62 <400> SEQUENCE: 3
63 Lys Lys Ser Arg Ala Leu Phe
64 1 5
67 <210> SEQ ID NO: 4
68 <211> LENGTH: 12
69 <212> TYPE: PRT
70 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/841,091

DATE: 12/20/2001

TIME: 21:07:02

Input Set : A:\NEMC-215.txt

Output Set: N:\CRF3\12202001\I841091.raw

```

72 <220> FEATURE:
73 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
74     Peptide Sequence
76 <400> SEQUENCE: 4
77 Arg Cys Leu Ser Ser Ser Ala Val Ala Asn Arg Ser
78     1             5             10
81 <210> SEQ ID NO: 5
82 <211> LENGTH: 15
83 <212> TYPE: PRT
84 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
88     Peptide Sequence
90 <400> SEQUENCE: 5
91 Arg Cys Leu Ser Ser Ser Ala Val Ala Asn Ser Ser Ala Leu Phe
92     1             5             10             15
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 19
97 <212> TYPE: PRT
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
102     Peptide Sequence
104 <400> SEQUENCE: 6
105 Arg Cys Glu Ser Ser Ser Ala Glu Ala Asn Arg Ser Lys Lys Glu Arg
106     1             5             10             15
108 Glu Leu Phe
112 <210> SEQ ID NO: 7
113 <211> LENGTH: 21
114 <212> TYPE: PRT
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
119     Peptide Sequence
121 <400> SEQUENCE: 7
122 Arg Met Leu Arg Ser Ser Ala Met Asp Glu Asn Ser Glu Lys Lys Arg
123     1             5             10             15
125 Lys Arg Ala Ile Lys
126     20
129 <210> SEQ ID NO: 8
130 <211> LENGTH: 21
131 <212> TYPE: PRT
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
136     Peptide Sequence
138 <400> SEQUENCE: 8
139 Arg Met Leu Arg Ser Ser Ala Met Asp Glu Asn Ser Glu Lys Lys Arg
140     1             5             10             15

```

RAW SEQUENCE LISTING

DATE: 12/20/2001

PATENT APPLICATION: US/09/841,091

TIME: 21:07:02

Input Set : A:\NEMC-215.txt

Output Set: N:\CRF3\12202001\I841091.raw

```

142 Lys Arg Ala Ile Phe
143             20
146 <210> SEQ ID NO: 9
147 <211> LENGTH: 15
148 <212> TYPE: PRT
149 <213> ORGANISM: Artificial Sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
153     Peptide Sequence
155 <400> SEQUENCE: 9
156 His Thr Leu Ala Ala Ser Gly Arg Arg Tyr Gly His Ala Leu Arg
157   1             5             10             15
160 <210> SEQ ID NO: 10
161 <211> LENGTH: 15
162 <212> TYPE: PRT
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
167     Peptide Sequence
169 <400> SEQUENCE: 10
170 His Thr Leu Ala Ala Ser Gly Arg Arg Tyr Gly His Ala Leu Phe
171   1             5             10             15
174 <210> SEQ ID NO: 11
175 <211> LENGTH: 23
176 <212> TYPE: PRT
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
181     Peptide Sequence
183 <400> SEQUENCE: 11
184 Lys Val Lys Ser Ser Gly Ile Arg Val Gly Ser Ser Lys Arg Lys Lys
185   1             5             10             15
187 Ser Glu Lys Lys Val Thr Lys
188             20
191 <210> SEQ ID NO: 12
192 <211> LENGTH: 23
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
198     Peptide Sequence
200 <400> SEQUENCE: 12
201 Lys Val Arg Ser Ser Gly Ile Arg Val Gly Ser Ser Lys Arg Lys Lys
202   1             5             10             15
204 Ser Glu Lys Lys Val Thr Phe
205             20
208 <210> SEQ ID NO: 13
209 <211> LENGTH: 19
210 <212> TYPE: PRT

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/841,091

DATE: 12/20/2001

TIME: 21:07:02

Input Set : A:\NEMC-215.txt

Output Set: N:\CRF3\12202001\I841091.raw

```

211 <213> ORGANISM: Artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
215     Peptide Sequence
217 <400> SEQUENCE: 13
218 Arg Ile Arg Ser Asn Ser Ser Ala Ala Asn Leu Met Ala Lys Lys Arg
219   1             5             10             15
221 Val Ile Arg
225 <210> SEQ ID NO: 14
226 <211> LENGTH: 20
227 <212> TYPE: PRT
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
232     Peptide Sequence
234 <400> SEQUENCE: 14
235 Arg Ile Arg Ser Asn Ser Ser Ala Ala Asn Leu Met Ala Lys Lys Arg
236   1             5             10             15
238 Val Ile Glu Phe
239             20
242 <210> SEQ ID NO: 15
243 <211> LENGTH: 18
244 <212> TYPE: PRT
245 <213> ORGANISM: Artificial Sequence
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
249     Peptide Sequence
251 <400> SEQUENCE: 15
252 Ser Gly Ser Arg Pro Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val
253   1             5             10             15
255 Val Arg
259 <210> SEQ ID NO: 16
260 <211> LENGTH: 18
261 <212> TYPE: PRT
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
266     Peptide Sequence
268 <400> SEQUENCE: 16
269 Ser Gly Ser Arg Pro Thr Gln Ala Lys Leu Leu Ala Lys Lys Arg Val
270   1             5             10             15
272 Val Phe
276 <210> SEQ ID NO: 17
277 <211> LENGTH: 6
278 <212> TYPE: PRT
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Description of Artificial Sequence: Extracellular
283     Agonist Peptide Sequence

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/841,091

DATE: 12/20/2001
TIME: 21:07:02

Input Set : A:\NEMC-215.txt
Output Set: N:\CRF3\12202001\I841091.raw

285 <400> SEQUENCE: 17
286 Ser Leu Ile Gly Lys Val
287 1 5
290 <210> SEQ ID NO: 18
291 <211> LENGTH: 14
292 <212> TYPE: PRT
293 <213> ORGANISM: Artificial Sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Description of Artificial Sequence: Extracellular
297 Agonist Peptide Sequence
299 <400> SEQUENCE: 18
300 Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
301 1 5 10
304 <210> SEQ ID NO: 19
305 <211> LENGTH: 97
306 <212> TYPE: PRT
307 <213> ORGANISM: Artificial Sequence
309 <220> FEATURE:
310 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
311 Peptide Sequence
313 <220> FEATURE:
314 <221> NAME/KEY: VARIANT
315 <222> LOCATION: (1)..(97)
316 <223> OTHER INFORMATION: Wherein Xaa is a space/gap induced by peptide alignment analysis
317
319 <400> SEQUENCE: 19
W--> 320 Arg Cys Leu Ser Ser Ser Ala Val Ala Asn Arg Ser Xaa Xaa Xaa Xaa
321 1 5 10 15
W--> 323 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
324 20 25 30
W--> 326 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
327 35 40 45
W--> 329 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
330 50 55 60
W--> 332 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
333 65 70 75 80
W--> 335 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Lys Ser Arg Ala Leu
336 85 90 95
338 Phe
342 <210> SEQ ID NO: 20
343 <211> LENGTH: 97
344 <212> TYPE: PRT
345 <213> ORGANISM: Artificial Sequence
347 <220> FEATURE:
348 <223> OTHER INFORMATION: Description of Artificial Sequence: Pepducin
349 Peptide Sequence
351 <220> FEATURE:
352 <221> NAME/KEY: VARIANT
353 <222> LOCATION: (1)..(97)

Xaa can only represent a single amino acid.

Per 1.822(5)(e)

*of sequence
rule, "A
sequence with
a gap or gaps
shall be presented
as a plurality
of separate
sequences,
with separate
sequence
identifiers ---"*

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/841,091

DATE: 12/20/2001

TIME: 21:07:03

Input Set : A:\NEMC-215.txt

Output Set: N:\CRF3\12202001\I841091.raw

L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:411 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:434 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:504 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:510 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:554 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:580 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:626 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:669 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31